This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

P.O. Box 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

02/17/2004

James W McKee
Fay Sharpe Fagan Minnich & McKee
1100 Superior Avenue
7th Floor
Cleveland, OH 44114-2518

EXAMINER .

SCHILLINGER, LAURA M

PAPER NUMBER

ART UNIT

DATE MAILED: 02/17/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018 867	02/27/2002	Timothy James Regan	UDI 2 0016	8474

TITLE OF INVENTION: METHOD OF MODIFYING AN INTEGRATED CIRCUIT

APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$665	\$0	\$665	05/17/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as

indicated unless corrected to maintenance fee notification	below or directed otherwise i	in Block I, by (a) speci	ifying a new co	errespondence addre	ss; and/or (b) indicating a sepa	arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)			ck I)	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must			
James W McKee Fay Sharpe Fagan Minnich & McKee 1100 Superior Avenue 7th Floor				have its own certificate of mailing or transmission. Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.			
Cleveland, OH 441	14-2518			(C			
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE	FIRST	NAMED INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/018,867	02/27/2002	Time	othy James Reg	an	UDL 2 0016	8474	
TITLE OF INVENTION: M	IETHOD OF MODIFYING A	AN INTEGRATED CIR	CUIT				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PU	BLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$665	· · · · · · · · · · · · · · · · · · ·	\$0	\$665	05/17/2004	
EXAM	IINER	ART UNIT	CI	ASS-SUBCLASS	7		
SCHILLINGE	R, LAURA M	2813	<u> </u>	438-014000			
PTO/SB/47; Rev 03-02 of Number is required. 3. ASSIGNEE NAME AND PLEASE NOTE: Unless been previously submitte (A) NAME OF ASSIGN	on (or "Fee Address" Indication more recent) attached. Use PRESIDENCE DATA TO BE an assignee is identified below to the USPTO or is being subseted.	on form of a Customer E PRINTED ON THE PA ow, no assignee data wil abmitted under separate (B) RES	ATENT (print of all appear on the cover. Complet IDENCE; (CIT	patent. Inclusion of ion of this form is NO Y and STATE OR C	assignee data is only approprious a substitute for filing an ass OUNTRY)		
4a. The following fee(s) are	e assignee category or categori		nent of Fee(s):	individual C	corporation or other private g	roup entity government	
☐ Issue Fee	encrosed.		` '	ount of the fee(s) is e	enclosed.		
☐ Publication Fee			□ Payment by credit card. Form PTO-2038 is attached.				
☐ Advance Order - # of	Copies		e Director is he sit Account Nui	ereby authorized by	charge the required fee(s), or (enclose an extra c	credit any overpayment, to opy of this form).	
Director for Patents is reque	sted to apply the Issue Fee and	d Publication Fee (if any	/) or to re-apply	any previously paid	issue fee to the application ide	ntified above.	
(Authorized Signature)		(Date)					
NOTE; The Issue Fee and Publication Fee (if required) we other than the applicant; a registered attorney or agent; or interest as shown by the records of the United States Patent a This collection of information is required by 37 CFR 1.311 obtain or retain a benefit by the public which is to file (an application. Confidentiality is governed by 35 U.S.C. 122 and estimated to take 12 minutes to complete, including gatheric completed application form to the USPTO. Time will vary case. Any comments on the amount of time you require suggestions for reducing this burden, should be sent to the Patent and Trademark Office, U.S. Department of Co 22313-1450. DO NOT SEND FEES OR COMPLETED SEND TO: Commissioner for Patents, Alexandria, Virginia 2		nf; or the assignee or cent and Trademark Office 1.311. The information is called by the USPTO to 22 and 37 CFR 1.14. This thering, preparing, and so vary depending upon exquire to complete this of the Chief Information of Commerce, Alexand ED FORMS TO THIS inia 22313-1450.	other parfy in ce. is required to oprocess) and scollection is submitting the the individual form and/or Officer, U.S. dria, Virginia S ADDRESS.			·	
collection of information u	duction Act of 1995, no penless it displays a valid OMB	control number.	respond to a	TH FFF(E)		· · · · · · · · · · · · · · · · · · ·	



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/018,867	02/27/2002	Timothy James Regan	UDL 2 0016	8474	
75	90 02/17/2004		EXAM	INER	
James W McKee			SCHILLINGER, LAURA M		
	Fay Sharpe Fagan Minnich & McKee 1100 Superior Avenue			PAPER NUMBER	
7th Floor			2813		
Cleveland, OH 44114-2518			DATE MAILED: 02/17/2004		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
	10/018,867	REGAN, TIMOTHY JAMES
, Notice of Allowability	Examiner	Art Unit
	Laura M Schillinger	2813
The MAILING DATE of this communication appeall claims being allowable, PROSECUTION ON THE MERITS IS therewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIP	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. THIS
1. X This communication is responsive to 11/13/2003.		
2. X The allowed claim(s) is/are <u>1,2,5-15 and 19-32</u> .		
3. $igotimes$ The drawings filed on <u>27 February 2002</u> are accepted by the second contract of the second contrac	ne Examiner.	
4. Acknowledgment is made of a claim for foreign priority unall All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submained in the Note of Draftspers of the priority document sheets. The Normal Patent Application (PTO-152) which give the Notice of Draftspers of the priority documents in the Normal Date including changes required by the Notice of Draftspers of the Normal Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Paper No./Mail Date including changes required by the attached Examiner's Comment regarding REQUIREMENT including REQUIREMENT including REQUIREMENT including Required Examiner's comment regarding REQUIREMENT including Required Examiner's comment regarding	e been received. e been received in Application No cuments have been received in this is of this communication to file a reply of IENT of this application. itted. Note the attached EXAMINER' es reason(s) why the oath or declarate it be submitted. Son's Patent Drawing Review (PTO-6 is Amendment / Comment or in the O is Amendment / Comment or in the O is Af(c)) should be written on the drawing the header according to 37 CFR 1.121(c) sit of BIOLOGICAL MATERIAL IN	national stage application from the complying with the requirements S AMENDMENT or NOTICE OF tion is deficient. 948) attached office action of the back) of all. nust be submitted. Note the
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. Interview Summary Paper No./Mail Dat Paper No./	e

Application/Control Number: 10/018,867

Art Unit: 2813

DETAILED ACTION

This Office Action is in response to Amendment dated 11/13/2003.

Allowable Subject Matter

Claims 1-2, 5-15, 19-32 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

In reference to claim 1, DiGiacomo teaches a method including the steps of:

Calculating a plurality of scaling ratios (Col.8, lines:: 30-45 and Col.8, line: 60 through Col.9, line: 15).

Selecting a scaling factor that is equal to or greater than the largest of the predetermined scaling ratios (Col.9, lines: 1-22);

Scaling the entire circuit represented by the data model with the scaling factor (Col.9, lines: 45-68, and

Adjusting each layer in the circuit for functionality and design rule compliance (Col.10, lines: 20-35 se also Col.11, lines: 20 through Col.15, line: 20- providing detailed calculations for design rules).

However, as Applicant points out in his 11/13/2003, DiGiacomo fails to explicitly teach nor suggest calculating a plurality of scaling ratios including geometry width and spacing for each routing layer, the via size ratio in each via layer and the transistor geometry ratio. IN contrast, DiGiacomo teaches to determine input/ output ratios which do not encompass specific

Art Unit: 2813

transistor geometries as claimed by the Applicant. Consequently, Applicant's claims 1-2, 5-15 are deemed to be allowable over prior art.

Claim 19 is the merely the independent form of claims 9 and 1 (originally presented). Claim 9 (dependent upon claim 1) was indicated as containing allowable subject matter in the Examiner's Non-Final Office Action dated 5/12/2003. Claims 20-32 depend from claim 19 and are therefore also considered to be allowable. The reasons for allowance are therefore clear upon the record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (703) 308-4940. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

_ Application/Control Number: 10/018,867

Art Unit: 2813

Page 4

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMS

February 6, 2003